A Case of Bovine Auricular Myiasis and Some Ectoparasites New to Hawaii

BY ELWOOD C. ZIMMERMAN

Entomologist, Bernice P. Bishop Museum

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On August 16, I attended an autopsy of a cow at the animal quarantine station in Honolulu for the purpose of searching for ectoparasites. The animal, which was in a run down condition, had been brought from the island of Molokai by the Territorial Veterinarians Dr. Willers and Dr. Hendershot for study of an apparent nutritional disease. The cow was butchered immediately after being shot. When the rumen was opened, I saw a full grown fly maggot crawling about in the food-mass. Upon searching for the source of the maggot, it was found that the animal's ears were packed with writhing masses of hundreds of fly maggots ranging in age from young to mature individuals. The maggot found in the rumen had evidently been licked up and swallowed by the cow. One of the ears was cut off, and some of the maggots from each ear were brought back to the laboratory. In due course, 275 *Chrysomyia megacephala* (Fabricius) and 39 *Chrysomyia rufifacies* (Macquart) adults were reared. In addition to this reared material, I saw a few larvae of a species of *Fannia* when the slaughterer cut open one of the ears and threw out a mass of maggots with his knife. Unfortunately, the *Fannia* material was lost.

A few days before killing the animal, Dr. Hendershot, who was responsible for my being present at the autopsy, removed a series of ticks from the cow's ears. I have identified the ticks as the argasine *Ornithodoros megnini* (Dugès), the spinose ear tick. There were other specimens of the tick present in the ears when I examined them. Perhaps sores developed in the ears after the ticks were removed and these sores were struck by the flies.

During the rearing of the *Chrysomyia* species, three specimens of the fly *Discomyza maculipennis* (Wiedemann) (Ephydridae) were reared. In spite of the precautions taken to prevent contamination of the culture, it is probable that the ephydrid gained entrance to the jar containing the ear and was not present when the ear was removed from the cow. However, I cannot be certain of this. This ephydrid has previously been reared only from dead sea shells in Hawaii and little is known of its biology.

During the preparation of my manual "Insects of Hawaii", I have collected or identified several species of ectoparasites which have heretofore apparently not been mentioned in Hawaiian literature. Some of these are now placed on record for the convenience of local workers.

I understand that the spinose ear tick mentioned above has been found on Oahu, Molokai, Maui and Hawaii.

A mite which has caused some trouble to human beings, and which has been lately studied by Mr. Pemberton and me, has been identified by Dr. Ewing as *Liponyssus bursa* (Berlese), the tropical fowl mite. We have found the mite common in the nests of English sparrows and mynah birds. Honolulu physicians have reported several cases of mite bite irritation resulting from the invasion of houses (especially bedrooms) by this minute mite. The mites can blow through ordinary screen from nests under the eaves of dwellings.

The sucking louse *Polyplax spinulosus* (Burmeister) has not been listed from the Territory, but I have seen specimens collected from rats in Honolulu.

I collected the sucking louse *Linognathus africanus* Kellogg and Paine from goats at Kahala, Honolulu in May, 1943.

The biting louse *Gliricola porcelli* (Linnaeus) was collected from Guinea pigs in Honolulu in June, 1943.

The cow discussed above was heavily infested with the biting louse, *Bovicola bovis* (Linnaeus).

In 1920, Mr. Swezey collected *Bovicola caprae* (Gurlt) from a goat in Honolulu.

I have examined specimens of the biting louse *Felicola subrostrata* (Nitzsch) at the Hawaiian Sugar Planters' Experiment Station taken from cats in Honolulu.

The biting louse *Columbicola columbae* (Linnaeus) was recently collected from pigeons in Honolulu.

Pembertonia, A New Genus of Papuan Cossoninae (Coleoptera, Curculionidae)

BY ELWOOD C. ZIMMERMAN

Entomologist, Bernice P. Bishop Museum

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To those who study the enormous family Curculionidae, or weevils, the seemingly endless array of forms and structural diversification becomes ever more remarkable and overwhelming. Peculiar